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(58) Field of search

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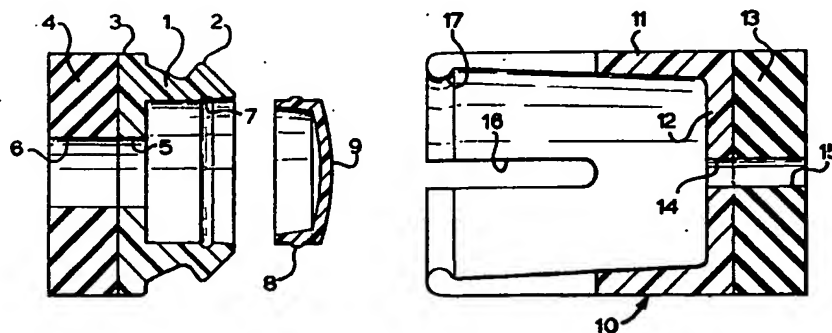
Fields

London WC2

lip 17, the parts 1 and 10 being mounted on respective rubber buffers (4, 13), one part on the door and the other on a mounting surface, so as to absorb shocks and allow for slight misalignment of the parts. The parts are preferably fixed by respective screws, the tube 3 having a cap 9 to conceal its screw.

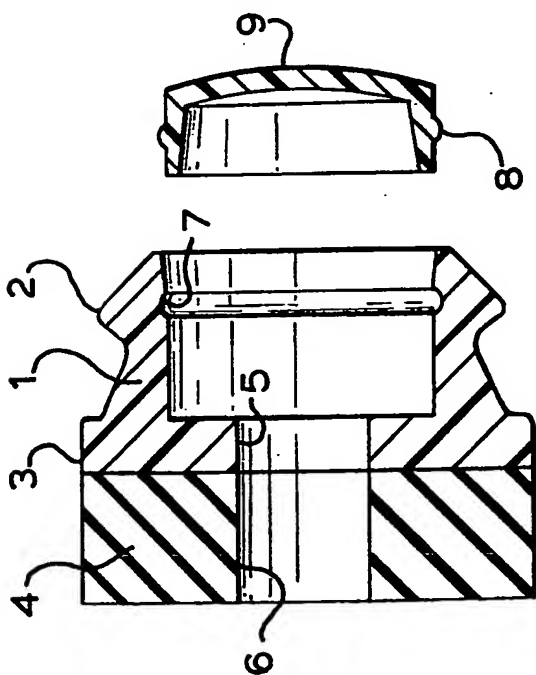
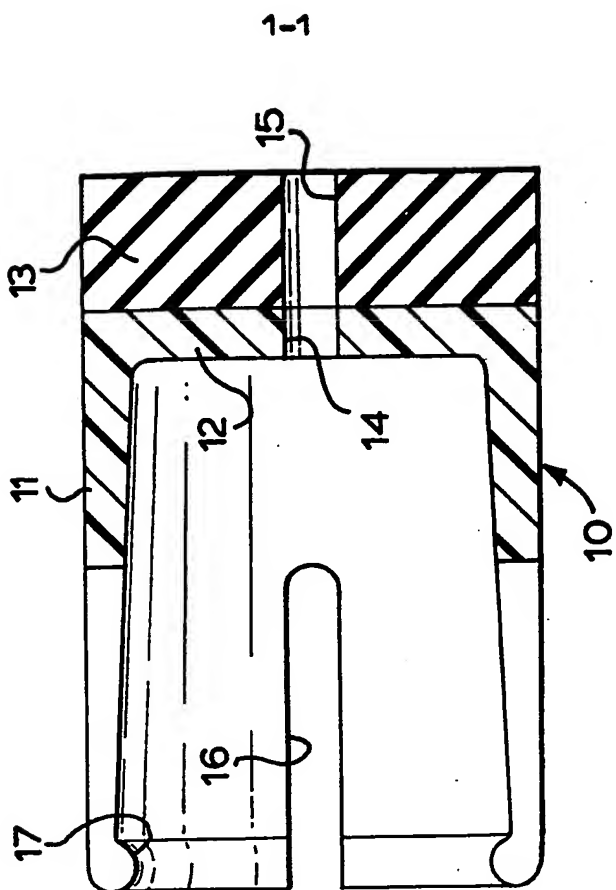
(54) Door stops

(57) A door stop comprises a male part 1 resiliently engageable with and disengageable from a female part 10, the male part comprising a tube 3 having an external lip 2, and the female part being a larger, slotted tube 11 having an internal



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SPECIFICATION

Door stop

- 5 This invention relates to a door stops.

Door stops are normally of one of two different types.

- The first type of door stop is designed to prevent damage to the door or walls or articles of furniture against which it may strike if opened quickly or too far. For this purpose some form of resilient pad normally serves as a door stop to limit movement of the door in a cushioned manner. A second, normally alternative form of door stop is to hold a door in a predetermined open position. For this purpose use may be made of a heavy weight against which the door abuts, a door wedge, or a spring loaded plunger mounted on the door and having a pad for frictional engagement with the floor.

It is an object of the invention to provide a door stop which is capable of performing both functions.

- 25 According to the invention there is provided a door stop comprising resiliently engageable and disengageable male and female parts adapted to be mounted one on the door and the other on a mounting surface so as to lie in the path of the said one part as the door is opened to a predetermined position, at least one of the parts being provided with a buffer pad to be inserted between the part and the door or other mounting surface. Preferably, both parts are provided with resilient pads.

- The male part may consist of an out-turned lip on an open end of a short hollow tube having a mounting base at its opposite end. The open end may be provided with a clip-in cap to conceal the mounting base.

- The female part may comprise a slotted tube having an in turned lip co-operable with the out turned lip in the male part, the slots opening to the open end of the tube to allow resilience of the engagement between the parts.

- The invention will be further described with reference to the accompanying drawing, of which the single figure is an exploded sectional view of a preferred form of door stop according to the invention.

- The drawing shows the component parts of a preferred form of door stop according to the invention. A male piece 1 has an external lip 2 formed at an open end of a short hollow tubular portion which terminates in a base 3. Between the base 3 and a door (not shown), there is located a rubber buffer 4, and the male piece 1 and the buffer 4 are secured by a fixing screw passing through aligned apertures 5 and 6 in the base 3 and the buffer 4 respectively. The male piece is also formed with an internal annular groove 7 which receives a cooperating bead 8 formed on a cap 9 so that the cap 9 may be snap fitted into

the male piece to conceal the fixing screw.

- The female piece 10, which is normally attached to a wall or skirting board so as to be in the path of the male piece 1 as the door opens, is in the form of a somewhat longer tube 11 having a base 12 which is mounted over a rubber buffer 13 by means of a screw (not shown) passing through aligned holes 14 and 15 in the base 12 and buffer 13 respectively. The open end of the tube is provided with a plurality of slots 16, e.g. four in number, to enable outward flexing of the open end of the female member so that the out-turned lip 2 can pass under an in-turned lip 17 formed at the open end of the tube 11. The material of which the pieces 1 and 10 are formed is somewhat resilient so that on normal opening of the door to the full extent permitted by the door stop, the out-turned lip 2 passes through and engages with the in-turned lip 17 but may be disengaged therefrom by a normal closing effort on the door. To assist this, the lip 17 is shown as being rounded while the lip 2 is chamfered on both sides.

- The buffers 4 and 13 act to cushion shocks arising from violent opening of the door and also allow a limited universal movement of the pieces 1 and 10 so that even if mating of the pieces is at a slight angle, a proper engagement is achieved.

- Various modifications may be made within the scope of the invention. The longer tube 11 of the female piece 10 may be somewhat tapered to enable it to be released from a mould. This means that the pad 13 may be either somewhat larger or smaller than the pad 4.

CLAIMS

1. A door stop comprising resilient engageable and disengageable male and female parts adapted to be mounted one on the door and the other on a mounting surface so as to lie on the path of the said one part as the door is opened to a predetermined position, at least one of the parts being provided with a buffer pad to be inserted between the part and the door or other mounting surface.

2. A door stop as claimed in claim 1, in which both parts are provided with resilient pads.

3. A door stop as claimed in claim 1 or 2, in which the male part consists of an out-turned lip on an open-end of a short hollow tube having a mounting base at its opposite end.

4. A door stop as claimed in claim 3, in which the open-end is provided with clip-in cup to conceal the mounting base.

5. A door stop as claimed in claim 3 or 4, in which the female part comprises a slotted tube having an in-turned lip co-operable with the out-turned lip in the male part, the slots

opening to the open end of the tube to allow resilience of the engagement between the parts.

6. A door stop as claimed in claim 5, in which the slotted tube is tapered.

7. A door stop substantially as hereinbefore described with reference to the accompanying drawing.

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